such as a nitride film constituting a hard mask and a nitride film constituting a spacer. The lift or crack may contaminate the wafer and the apparatus or may cause contact between the wirings when the device is driven, resulting in a leakage current which degrades electrical characteristics of the device. Further, this phenomenon may significantly affect the throughput of the device since it is severe in an edge of the wafer. The invention provides a method of forming wirings in a semiconductor device capable of preventing a lift or a crack by forming the spacer with a nitride film having similar stress characteristics with the hard mask.

With respect to independent claim 1, the applicants respectfully submit that the applicants' allegedly admitted prior art, Harakawa, and Beinglass, whether taken singly or in combination, do not teach or suggest the claimed combination, including at least the steps of "depositing a nitride film on said metal layer by a low-pressure chemical vapor deposition method in single type chamber to form a hard mask layer, and depositing a nitride film having similar stress characteristics with the hard mask layer by a low-pressure chemical vapor deposition method in the single type chamber and then etching to form a spacer at a sidewall of the patterned metal layer, the patterned polysilicon layer and the patterned hard mask", as recited in claim 1.

Harakawa and Beinglass do not recognize above-described problem. Also, the applicants' allegedly admitted prior art, Harakawa, and Beinglass do not teach or disclose that the hard mask and the spacer are formed by using a nitride film having similar stress characteristics in order to prevent a lift or a crack generated when nitride films having different physical properties come in contact.

Further, the examiner admits that applicants' allegedly admitted prior art does not teach depositing the nitride layer having similar stress characteristics with the hard mask by low-pressure chemical vapor deposition. In applicants' allegedly admitted prior art, the hard

mask is made of a nitride film deposited by a plasma chemical vapor deposition (PECVD) method (see page 2, lines 14-16), and the spacer is made of a nitride film deposited by a low-pressure chemical vapor deposition (LPCVD) method in a batch-type chamber (see page 3, lines 2-5).

MPEP §2143.03 instructs that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royak, 409 F.2d 981, 180 USPQ 580 (CCPA 1974)." Accordingly, because the recited references, whether taken singly or combined, do not teach or suggest all the claim limitations, applicants respectfully assert that the official action has not established a *prima face* case of obviousness. If the official action is relying on some other rationale, the applicants traverse such an assertion and request identification of a reference in support of such rationale in accordance with MPEP §2144.03.

For the above reason, the applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn because cited references, whether taken singly or combined, do not teach or suggest each and every feature of independent claim 1.

Further, applicants respectfully assert that rejections of dependent claims 2-4 containing all of the limitations of independent claim 1 under 35 U.S.C. §103(a) should also be withdrawn at least because of their dependencies upon independent claim 1 and for the reasons set forth above.

In light of the foregoing remarks, the applicants submit that all pending claims are in condition for allowance. Accordingly, the applicants respectfully request that the examiner pass this case to issue. If the examiner believes that personal contact with applicants' representative would expedite prosecution of the application, he is invited to call the undersigned at his convenience.